

Coaxial Switch

50Ω SP4T Pin Diode, Reflective TTL Driver 10 to 2500 MHz

ZSDR-425+



Generic photo used for illustration purposes only

CASE STYLE: GGG126

Connectors Model
SMA ZSDR-425+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

Power L(+20 dBm), M(+28 dBm), U(+30 dBm)

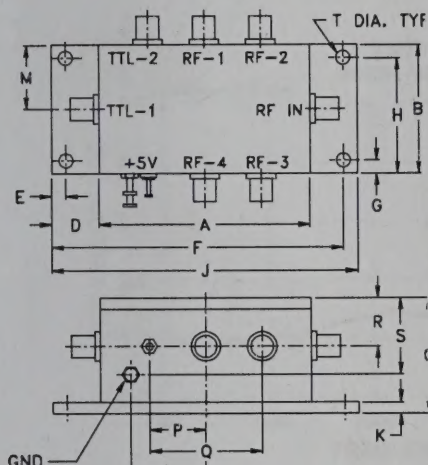
Supply V +6V max.

Permanent damage may occur if any of these limits are exceeded.

Coaxial/Pin Connections

RF IN	RF-IN
RF OUT 1	RF-1
RF OUT 2	RF-2
RF OUT 3	RF-3
RF OUT 4	RF-4
TTL-1	TTL-1
TTL-2	TTL-2
+5V	+5V

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K
2.25	1.38	1.24	.50	.150	3.100	.138	1.238	.30	.12
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45	7.62	3.05

L	M	N	P	Q	R	S	T	wt
.80	.69	--	.60	1.200	.52	.82	.150	grams
20.32	17.53	--	15.24	30.48	13.21	20.83	3.81	80.0

Features

- wideband, 10 to 2500 MHz
- high isolation, 40 dB typ.

Applications

- test set-ups
- antenna switching
- satellite communication

Electrical Specifications (T_{AMB}=25°C)

MODEL NO.	FREQ. (MHz)	INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)					
		Low band lw		Upper band U		Frequency Band					
	f _L	f _U	Typ.	Max.	Typ.	Max.	L	M	U		
			Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.
ZSDR-425(+)	10	2500	1.1	1.7	1.5	2.5	60	40	40	30	35

L= low range (f_L to 10 f_L)

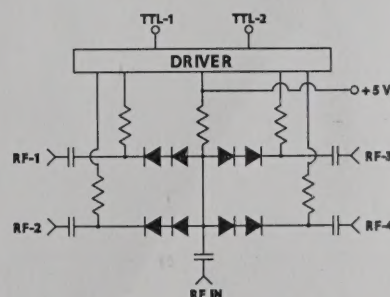
M=mid range (10 f_L to f_U/2)
lw=low band (f_L to f_U/2)

U=upper range (f_U/2 to f_U)

Additional Specifications

VSWR ("ON" STATE)	1.3 Typ., 1.9 Max.
SWITCHING TIME (μSEC)	2.0 Typ., 4.0 Max.
SUPPLY VOLTAGE	+5V
SUPPLY CURRENT	10mA Max.
TTL INPUT HIGH THRESHOLD	2V Min.
TTL INPUT LOW THRESHOLD	0.8V Max.
1 dB COMPRESSION	10 to 100 MHz Above 100 MHz
	+6 increasing to +19 dBm +19 dBm min.

Control Logic



	TTL LOGIC	
	TTL-1	TTL-2
RF-1	1	0
RF-2	1	1
RF-3	0	1
RF-4	0	0

Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

Mini-Circuits

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REV. C
M151107
ZSDR-425+
WP/CP/AM
151007

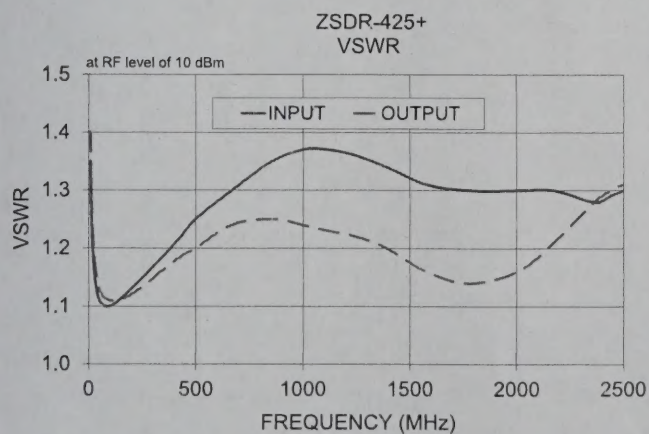
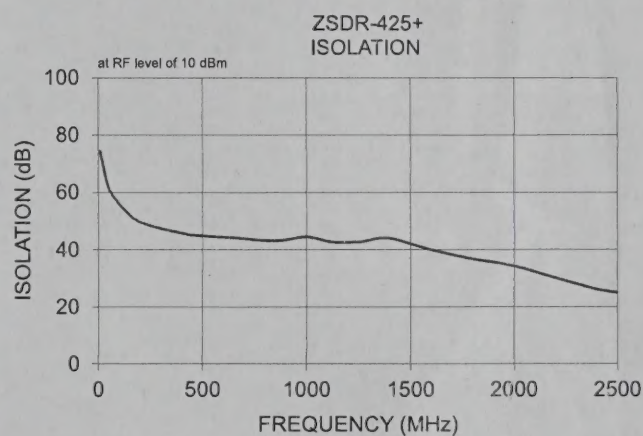
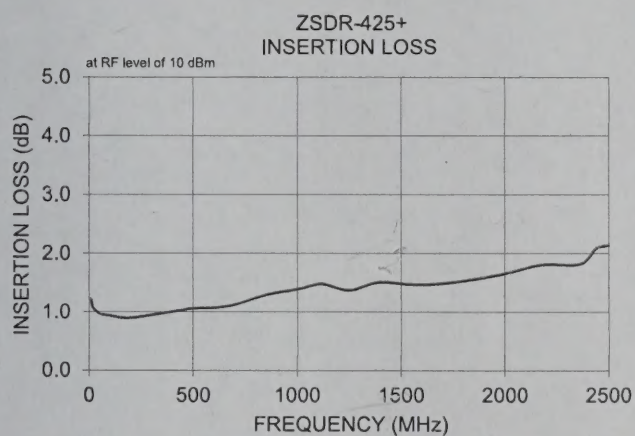


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Typical Performance Data

FREQ. (MHz)	ON (TTL LOW @ 0V) IN-OUT		INSERTION LOSS (dB) AMP. UNBAL.		OFF (TTL HIGH @ 5V) IN-OUT		ISOLATION (dB) DELTA		VSWR		
									IN	OUT (RF 1)	
	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	ON	OFF
10.00	1.22	0.16	0.18	0.15	74.41	4.10	9.64	5.24	1.35	1.40	27.25
20.00	1.06	0.12	0.15	0.12	70.64	2.69	8.25	4.56	1.19	1.22	27.08
50.00	0.97	0.09	0.13	0.09	61.72	2.10	8.97	7.88	1.11	1.13	27.42
100.00	0.94	0.09	0.12	0.09	56.09	1.46	6.48	2.94	1.10	1.11	26.82
200.00	0.90	0.08	0.12	0.08	49.80	1.51	6.32	3.03	1.13	1.12	26.58
408.40	1.01	0.07	0.11	0.07	45.66	1.36	5.61	1.32	1.21	1.18	26.03
500.00	1.06	0.08	0.12	0.09	44.93	1.43	5.49	1.62	1.25	1.20	24.98
669.85	1.10	0.07	0.12	0.07	44.06	1.59	5.94	1.86	1.30	1.24	24.36
856.60	1.30	0.07	0.13	0.08	43.15	1.93	6.13	2.01	1.35	1.25	22.45
1000.00	1.39	0.05	0.11	0.07	44.52	3.69	8.35	2.97	1.37	1.24	20.59
1118.05	1.48	0.05	0.13	0.07	42.72	2.91	8.56	3.40	1.37	1.23	19.44
1250.00	1.37	0.06	0.13	0.06	42.75	2.61	10.05	4.95	1.36	1.22	19.15
1391.95	1.51	0.09	0.16	0.07	44.07	3.21	10.73	3.71	1.34	1.20	18.57
1578.70	1.47	0.05	0.15	0.05	40.41	2.62	9.61	3.27	1.31	1.16	17.15
1777.90	1.52	0.05	0.17	0.05	37.07	2.87	9.43	3.26	1.30	1.14	16.04
2002.00	1.66	0.12	0.20	0.08	34.27	3.55	9.08	1.82	1.30	1.16	13.88
2176.30	1.81	0.09	0.20	0.08	30.64	3.24	7.16	1.46	1.30	1.21	12.25
2363.05	1.82	0.07	0.19	0.04	26.86	2.95	5.63	1.07	1.28	1.28	9.41
2437.75	2.08	0.14	0.24	0.05	25.66	2.78	5.42	1.03	1.29	1.30	7.81
2500.00	2.14	0.16	0.25	0.05	25.03	2.28	5.15	1.27	1.30	1.31	7.10



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